

In the claims:

Please amend claims 1, 5, 6, 10, and 16 as follows:

Sub B1  
92

1. (Once Amended) A load coil for insertion along a local loop, the load coil comprising:  
2 a coupled inductor having first and second windings wrapped about an inductor core,  
3 each winding having an input and an output, the coupled inductor configured to counteract a  
4 parallel capacitance of the local loop to improve transmission of POTS-band signals across the  
5 local loop;  
6 a first capacitive element disposed between the input of the first winding and the input of  
7 the second winding; and  
8 a second capacitive element disposed between the output of the first winding and the output  
9 of the second winding, the first capacitive element and the second capacitive element configured to  
10 permit passage of DSL signals across the load coil.

Sub B2  
93

5. (Once Amended) The load coil of claim 1, wherein the first and second windings have an  
2 inter-winding capacitance and the first and second capacitive elements increase the effective inter-  
3 winding capacitance of the first and second windings by at least a factor of 5.

B<sup>2</sup>  
93  
1 6. (Once Amended) A load coil for insertion along a local loop, the load coil comprising:  
2 a coupled inductor having first and second windings wrapped about an inductor core,  
3 each winding having an input and an output, the coupled inductor configured to improve  
4 transmission of POTS-band signals across the local loop;  
5 a first capacitive element disposed in parallel with the first winding; and  
6 a second capacitive element disposed in parallel with the second winding, the first capacitive  
7 element and the second capacitive element configured to permit passage of DSL signals across the  
8 load coil with low attenuation.

Sub  
C1  
94  
1 10. (Once Amended) The load coil of claim 6, wherein the first and second windings each have  
2 an intra-winding capacitance and the first and second capacitive elements increase the effective  
3 intra-winding capacitance of the first and second windings by at least a factor of 120.

Sub  
B4  
95  
1 16. (Once Amended) A load coil coupled to a local loop for improving simultaneous  
2 transmission of POTS and DSL signals across the local loop in any direction, the load coil  
3 comprising:  
4 inductive means for conditioning the POTS signals as they traverse the local loop; and  
5 capacitive means coupled to the inductive means for permitting the DSL signals to pass  
6 across the load coil.

Please add claims 18-23 as follows:

Sub B6 1 18. (New) A method for improving simultaneous transmission of POTS-band signals and DSL  
2 signals across a local loop, comprising the steps of:

3 inductively coupling a first segment of the local loop to a second segment of the local loop to

4 condition the POTS-band signals traversing the local loop; and

5 capacitively coupling the first segment of the local loop to the second segment of the local

6 loop to pass the DSL signals traversing the local loop with low attenuation.

1 19. (New) The method of claim 18, wherein the step of inductively coupling includes coupling a  
2 first wire of the first segment of the local loop to a first wire of the second segment of the local loop  
3 via a first inductor winding wrapped about an inductor core, and coupling a second wire of the first  
4 segment of the local loop to a second wire of the second segment of the local loop via a second  
5 inductor winding wrapped about the inductor core.

1 20. (New) The method of claim 18, wherein the step of capacitively coupling includes coupling a  
2 first wire of the first segment of the local loop to a second wire of the second segment of the local  
3 loop via a first capacitive element, and coupling a second wire of the first segment of the local loop  
4 to a first wire of the second segment of the local loop via a second capacitive element.

1 21. (New) The method of claim 18, wherein the step of capacitively coupling includes coupling a  
2 first wire of the first segment of the local loop to a first wire of the second segment of the local loop  
3 via a first capacitive element, and coupling a second wire of the first segment of the local loop to a  
4 second wire of the second segment of the local loop via a second capacitive element.

Sub B7  
1 22. (New) A system to improve simultaneous transmission of POTS-band signals and DSL  
2 signals across a local loop, the system comprising:

3 a first local loop, the first local loop including

4 a first wire, and

5 a second wire;

6 a second local loop, the second local loop including

7 a third wire, and

8 a fourth wire;

9 a coupled inductor configured to condition the POTS-band signals traversing the first and

10 second local loops, the coupled inductor including

11 an inductor core;

12 a first inductor winding wrapped about the inductor core and coupling the first wire to

13 the third wire, and

14 a second inductor winding wrapped about the inductor core and coupling the second

15 wire to the fourth wire; and

16 capacitive elements configured to pass the DSL signals traversing the first and second local

17 loops, the capacitive elements including

18 a first capacitor coupling the first wire to the fourth wire, and

19 a second capacitor coupling the second wire to the third wire.

23. (New) A system to improve simultaneous transmission of POTS-band signals and DSL signals across a local loop, the system comprising:

a first local loop, the first local loop including

a first wire, and

a second wire;

a second local loop, the second local loop including

a third wire, and

a fourth wire;

a coupled inductor configured to condition the POTS-band signals traversing the first and second local loops, the coupled inductor including

an inductor core,

a first inductor winding wrapped about the inductor core and coupling the first wire to the third wire, and

a second inductor winding wrapped about the inductor core and coupling the second wire to the fourth wire; and

capacitive elements configured to pass the DSL signals traversing the first and second local loops, the capacitive elements including

a first capacitor coupling the first wire to the third wire, and

a second capacitor coupling the second wire to the fourth wire.